

Magnetic dynamical coupling in kagome artificial spin ice



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Schematic of sample and measurement



CPW with ASI pattern sample ' sample 2

Mumax simulation



FMR f-H spectra



Simulated resonance modes



⁵ f (GHz)

0

10



f =9.0 GHz bulk mode in adjacent strips.

f =11.1 GHz bulk mode in adjacent strips.

0

-π

Phase



Magnetization switching caused changes are observed.

Simulated magnetic dynamical coupling



Summary

> The kagome-type ASI lattices were prepared and the related magnetic dynamical properties were studied using the broadband FMR technique and





\succ By changing the in-plane magnetic field angle θ_{H} , magnetic dynamical coupling in kagome ASI lattice were observed and analyzed.